

REMARKS/ARGUMENTS

Prior to this Amendment, claims 29, 30, 38, and 52-63 were pending in the application.

Independent claim 29 is amended to include the allowable subject matter of claim 52, which is cancelled. Entry of this amendment is requested to place claim 29 and claims 30, 38, and 53-58, which depend from claim 29, in condition for allowance.

New claims 64-66 are presented to further protect the allowed subject matter by presenting allowed claims 59-61 with small claim amendments that are believed to still clearly distinguish the claims from the cited references. Entry of these claims is requested even though the application is under a final rejection because they do not place an undue burden on the Examiner or require additional searching and are being presented based on the Examiner's reasons for allowance provided on page 4 of the Office Action (i.e., the claims could not have been readily presented earlier because the allowable subject matter had not yet been identified by the Examiner).

New claim 67 is presented to rewrite previously presented dependent claim 56 in independent form. Entry of this claim is requested because it presents subject matter previously in front of and considered by the Examiner and allows Applicants to again argue for the allowance of these claims (i.e., the combination of previously presented claims 29 and 56, which should not require additional searching by the Examiner).

After entry of the Amendment, claims 29, 30, 38, and 53-67 remain for consideration by the Examiner.

Allowable Subject Matter

In the November 29, 2006 Office Action, claims 59-63 were allowed.

Additionally, claim 52 was objected to as being dependent upon a rejected base claim but was found to be allowable if rewritten in independent form to including the limitations of the base claim and any intervening claims. In response, claim 52 is rewritten in independent form by amending its base claim (i.e., claim 29) to include its

limitations. After entry of the claim amendment, claim 29 and claims 30, 38, and 53-58, which depend from claim 29, are believed in condition for allowance.

New independent claim 64 is believed to present similar subject matter to that of allowed claim 59. However, claim 59 calls for a legged figure coupled to "a wheeled support" while new claim 64 calls for the legged figure to be coupled to a "mobile support." It is believed that this claim language still clearly differentiates the claimed method from the cited reference or falls within the spirit of the reasons of allowance provided by the Examiner on page 4 of the final Office Action. Additionally, the moving of the mobile support step or action has been modified slightly to provide additional or differing protection for the allowed subject matter. New claims 65 and 66 depend from claim 64 and are believed allowable at least for the reasons provided for allowing claim 64.

Claim Rejections Under 35 U.S.C. §102

In the November 29, 2006 Office Action, claims 29, 30, 38 and 53-58 were rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Pat. No. 6,317,652 ("Osada"). This rejection is traversed based on the following remarks.

Independent claim 29 is amended to include subject matter of claim 52 that the Examiner found to be allowable in light of the teaching of Osada. Hence, claim 29 as amended includes subject matter not shown in Osada, and claim 29 and claims 30, 38, and 53-58, which depend from claim 29, are allowable over Osada.

New claim 67 includes the limitations of claim 29 (but, without prior to the addition of the limitations of claim 52) and also of claim 56. Hence, claim 67 is directed to a method for controlling movement of a legged figure that includes receiving a command that represents "a velocity of move the figure." The velocity is then translated into both a step length and a step time. The legs are then moved the step length within the step time in a coordinated fashion to achieve the movement of the legged figure at the input velocity. Osada fails to discuss the receipt of a velocity setting in an input

command, converting this to a step length and a step time, and then moving legs based on the step length and time. Osada is directed toward controlling movement of legs of a robot to avoid obstacles detected through the use of a camera and calculating means that determine positional relationships between the legs and the obstacle (see col. 2, line 57 to col. 3, line 37). However, there is no discussion in Osada of varying the velocity of the robot to achieve a desired velocity with much of the teaching being how to climb varying depth and height steps (e.g., see Figures 1-2(h)). Hence, Osada fails to anticipate the method of claim 67.

More specifically, the Office Action cites item 31 of Figure 3 as showing receiving a command from an input device and image control means 35 for showing that the command represents a velocity at which to move the figure. However, in col. 3, lines 25-27, Osada states that an "analog image signal outputted from the camera 7 is converted by an image data input unit 31 into digital data, which is stored in an image memory 32." The unit or element 31 does not receive a command that represents a velocity to move the figure as called for in claim 67 but instead received an analog image that is converted into a digital image for storage in the robot's memory. Item 35 is described in col. 6 at lines 23-29 as being an image input control means of the controller 30 that "instructs the image data input unit 31 to capture image data from the camera 7." There is not teaching in Osada that the controller 30 or its unit 31 acts to control the velocity of the robot or that it does so based on an input command from an input device. Instead, Osada teaches that the controller determines when to store digital images captured by a camera. Osada fails to teach the receiving step of claim 67, and the claim is not anticipated by Osada for at least this reason.

Further, the Office Action cites Osada's controller 30 of Figure 3 as translating the velocity of the input command into a step length. Controller 30 functions to perform the process shown in Figure 4 of Osada, but, as shown, there is no discussion of varying the velocity of the robot based on input from the camera, based on detected obstacles and determined relative positions of the legs to the obstacles, or based on a

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received velocity command as called for in claim 67. A step length and angle are determined to achieve proper landing on a staircase, but Osada does not perform such determinations by translating an input velocity. Hence, Osada fails to anticipate claim 67 because it does not show or even suggest translating the velocity into a step length.

Yet further, the Office Action at the bottom of page 3 cites Osada at Figures 2a-2h and Figure 4 for teaching that the Osada controller 30 translates the velocity into a step time by controlling and adjusting the movement of the robot's legs in short intervals to stabilize walking operation. However, this teaching of Osada shows that the controller 30 determines while a leg is in the air (in some cases) where the leg should land based on visual images from a camera (see, for example, the Summary at col. 3, lines 27-31). There is no discussion that the controller varies the step time to achieve a desired velocity for a robot or that the step lengths have to be performed within such a step time as called for in claim 67. Hence, Osada also fails to show the step of translating velocity into a step time and, for this additional reason, fails to support an anticipation rejection of claim 67.

Conclusions

In view of all of the above, it is respectfully requested that a timely Notice of Allowance be issued in this case.

No fee is believed due for this submittal. However, any fee deficiency associated with this submittal may be charged to Deposit Account No. 50-1123.

Respectfully submitted,

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